

CLAIMS

I claim:

1. A microcomputer controlled system for recycling washing machine gray water effluent to irrigation and an outside toilet comprising:

a microcomputer for controlling the recycling system;

a large gray water tank having a discharge hose attached to a washing machine's drain hose ending in a filter sock inside the tank;

a vertical suction tube having an external switch pump;

a pipe leading from the pump bifurcating to form a restricted flow branch pipe and an unrestricted flow branch pipe;

a pressure regulator device on said restricted flow branch pipe;

at least three in-line chemical filters for filtering restricted flow gray water;

an ultraviolet radiation device radiating the filtered gray water; and

a conduit passing the filtered radiated gray water to an outside toilet and to a water sprinkler system.

2. The gray water recycling system according to claim 1, wherein the tank is a fifty-five gallon drum located adjacent to the washing machine.

3. The gray water recycling system according to claim 1, wherein a one-way check valve is positioned at an inlet of the vertical suction tube.

4. The gray water recycling system according to claim 1, wherein the unrestricted flow branch pipe conducts gray water to a zone valve and joins the filtered and radiated gray water stream.

5. The gray water recycling system according to claim 1, wherein the tank has an overflow drain pipe inclined downward 10 to 15 degrees.

6. The gray water recycling system according to claim 1, wherein the in-line filters are selected from the group consisting of ion exchange resin, activated carbon and mixtures thereof.

7. The gray water recycling system according to claim 1, wherein the pH of the gray water inside the tank is adjusted to a range of 7 to 8 by an acidic reagent selected from the group consisting of a biodegradeable soup, vinegar and acetic acid.

8. The gray water recycling system according to claim 7, wherein the pH is adjusted by addition of a biodegradable soup.

9. The gray water recycling system according to claim 7, wherein the pH is adjusted by addition of either vinegar or acetic acid.

10. A system for recycling washing machine gray water effluent to irrigation and an inside/outside toilet comprising:

a microcomputer for controlling the system;

a large gray water tank having a discharge hose attached to a washing machine's drain hose ending in a filter sock inside the tank;

a vertical suction tube having an external switch pump;

a pipe leading from the pump to a filter and a strainer in line;

an ultraviolet radiation device irradiating the filtered gray water;

an unrestricted gray water supply line joining the filtered and irradiated gray water supply line;

a pressure switch measuring and adjusting the pressure of the supply line;

a manifold and a pressure gauge;

a supply pipe positioned from the manifold to a supply line having a series of solenoid valves for controlling the supply of treated gray water to the inside toilet and outside devices;

a reservoir containing an 8 to 20 psi mist or drip device;

and

a drain valve for controlling the level of the treated gray water.

11. The gray water recycling system according to claim 10, wherein the tank is a fifty-five gallon drum located adjacent to the washing machine.
12. The gray water recycling system according to claim 11, a one-way check valve is positioned at an inlet of the vertical suction tube.
13. The gray water recycling system according to claim 11, wherein the tank has an overflow drain pipe inclined downward 10 to 15 degrees.
14. The gray water recycling system according to claim 11, wherein the gray water from the tank flows through a filter.
15. The gray water recycling system according to claim 14, wherein the filter is selected from the group consisting of an organic ion exchange resin and an activated carbon.
16. The gray water recycling system according to claim 15, wherein the filter is an organic ion exchange resin.
17. The gray water recycling system according to claim 15, wherein the filter is activated carbon.

18. The gray water recycling system according to claim 11, wherein a water meter is inserted in the gray water line after the ultraviolet radiation device.

19. The gray water recycling system according to claim 11, wherein a low-level controller device is inserted in the gray water line between the solenoid valves and the manifold.

20. The gray water recycling system according to claim 11, wherein the outside devices are an outside toilet and a water sprinkler system.